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10/010,719	11/08/2001	Weidong Mao	TVW/APP32US	2723

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EXAMINER
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SCHNURR, JOHN R

ART UNIT	PAPER NUMBER
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2623

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/010,719	<b>Applicant(s)</b> MAO ET AL.	
	<b>Examiner</b> JOHN R. SCHNURR	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 11, 13, 14, 18-24 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11, 13, 14, 18-24 and 31-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/18/2008 has been entered.

**DETAILED ACTION**

2. Claims 1-5, 11, 13, 14, 18-24 and 31-42 are pending and have been examined.

***Response to Arguments***

3. Applicant's arguments filed 01/18/2008 have been fully considered but they are not persuasive.

In response to applicant's argument (Remarks section A) that McCoskey (US PG PUB 2003/0028889) fails to disclose providing video from a plurality of incompatible and non-interoperable video on demand systems, the examiner respectfully disagrees. McCoskey clearly teaches an aggregator (Fig. 4: 201) which receives content from a plurality of diverse sources ([0045]) and reformats the content into a format suitable for delivery to the user terminals ([0053]). Therefore, content sources of McCoskey are clearly "incompatible and non-interoperable" or there would be no reason for the aggregator to collect, reformat and store the content already stored on the remote sources ([0046]).

Applicant further argues that “the examiner acknowledges ... McCoskey fails to disclose communicating in multiple protocols”. As discussed in the previous office action (Final Rejection dated 10/18/2007) the acknowledgment referred to was an acknowledgment that McCoskey does not specifically disclose receiving *lists* of currently available content in different protocols not “McCoskey fails to disclose communicating in multiple protocols”.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **1-5, 11, 13, 14, 18-24 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over **McCoskey et al. (US Patent Application Publication 2003/0028889)**, McCoskey, in view of **Ogawa et al. (US Patent 6,314,571)**, Ogawa.

Consider **claim 1**, McCoskey clearly teaches a system providing video on demand services from a plurality of incompatible and non-interoperable VOD systems. **(Fig. 1: The system 200 provides VOD services from a plurality of incompatible devices, [0045])**

receiving a request from a receiver station for all currently available VOD assets; **(A programming search request is created and sent by the user, [0086]. The search criteria may be set so as to return all available content.)**

transmitting to each of the plurality of incompatible VOD systems a request for a respective list of all currently available VOD assets; **(Fig. 4: Search engine server 350 periodically requests information on all available programming from the remote sources, [0065])**

Art Unit: 2623

aggregating the translated lists of all currently available VOD assets to form a combined list of available VOD assets, the combined list of available VOD assets being adapted to be compatible with a plurality of receiver stations. **(Fig. 10: Aggregator local database 501 contains the remote content database 261 which stores a catalog of all content stored in each of the remote databases, [0079]-[0080].)**

McCoskey further teaches receiving all currently available VOD assets, in response to the request for the assets. **(Remote content crawler 356 retrieves all information about all content not previously logged, [0065])**

However, McCoskey does not explicitly teach each received list being formatted in a unique protocol and translating the received lists into a generic protocol.

In an analogous art Ogawa, which discloses a system for collecting information stored in separate systems and transmitting a combined list of all assets, clearly teaches receiving the lists in different protocols and translating the lists into a generic protocol. **(Fig. 6: The EPG data collection and delivery center 1 receives EPG data from a plurality of sources in different formats and data converting section 14 converts the data into a generic format and stores the data in the transmitting-data storing section 131, column 10 lines 53-67.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McCoskey by receiving the lists in different formats and translating them into a generic format, as taught by Ogawa, for the benefit of providing updated information to the users without changing individual system configurations (see column 2 lines 31-42 Ogawa).

Consider **claim 2**, McCoskey and Ogawa, combined as in claim 1, clearly teach, after receiving a request for content from a user **(Fig. 15b: In step 712 the user requests content then in step 715 the request is sent to the aggregator 201, [0103] McCoskey.)**, performing the following steps:

identifying which VOD system is associated with the requested VOD asset via the received list of all currently available VOD assets from one of the plurality of incompatible VOD systems; **(Fig. 16a: In step 759 the metadata associated with the requested content is analyzed to determine the storage location of the content, [0106] McCoskey.)**

transmitting, to the identified VOD system, a compatible request for the VOD asset; **(Fig. 16b: In step 762 the remote content server 204 is notified of the request, [0107] McCoskey.)**

Art Unit: 2623

receiving the requested VOD asset from the identified VOD system; **(Fig. 17a: In step 804 the requested content is transmitted to the aggregator 201, [0109] McCoskey.)**

adapting the received VOD asset to be compatible with the requesting receiver station; **(Fig. 17b: In steps 812 and 813 the content is formatted to the required format, [0111] McCoskey.)**

transacting for the requested VOD asset with the requesting receiver station and the identified VOD system. **(Fig. 17c: If billing or fees are applicable routine 830 enters the user, content meta data and content provider into the billing process 900, [0117 McCoskey.]**)

Consider **claims 3, 14, 21, 22, 23, 24, 33, 34, 35 and 36**, McCoskey and Ogawa, combined as in claims 1, 13, 20 and 32, clearly teach the requested VOD asset may be a video program, audio program, electronic book (text) or multimedia (graphic). **([0043] McCoskey)**

Consider **claim 4**, McCoskey and Ogawa, combined as in claim 1, clearly teach each VOD system contains an asset management system for managing respective assets **(Fig. 16b: The remote servers use routine 763 to control the dissemination of the content, [0107] McCoskey.)** and a business management system for managing transactions. **(Aggregator 201 negotiates fees with content providers and distributes compensation to the content providers, [0123] McCoskey.)** The VOD asset management system is communicated with via an asset gateway. **(Fig. 4: Content acquisition server 400 requests content from the remote servers, [0060] McCoskey.)** The business management system is transacted with using a transaction gateway. **(Fig. 10: Content fee and copyright billing server 507 communicates with the business management system of the content providers, [0123] McCoskey.)**

Consider **claim 5**, McCoskey and Ogawa, combined as in claim 1, clearly teach providing the desired asset to the receiver using either digital storage command and control or real time streaming protocol. **(The content may be streamed to the user or delivered and stored by the user for later playback, [0116] McCoskey.)**

Consider **claim 11**, McCoskey clearly teaches a system providing video on demand services from a plurality of incompatible and non-interoperable VOD systems. **(Fig. 1: The system 200 provides VOD services from a plurality of incompatible devices, [0045])**

transmitting to each of the plurality of incompatible VOD systems a request for a respective list of all currently available VOD assets; **(Fig. 4: Search engine server 350 periodically requests information on all available programming from the remote sources, [0065])**

aggregating the translated lists of all currently available VOD assets to form a combined list of available VOD assets, the combined list of available VOD assets being adapted to be compatible with a plurality of receiver stations. **(Fig. 10: Aggregator local database 501 contains the remote content database 261 which stores a catalog of all content stored in each of the remote databases, [0079]-[0080].)**

receiving a request from a receiver station for a VOD asset; **(Fig. 15b: In step 712 the user requests content then in step 715 the request is sent to the aggregator 201, [0103] McCoskey.)**

in response to a request from a receiver station for a VOD asset, performing the following steps:

identifying which VOD system is associated with the requested VOD asset via the received list of all currently available VOD assets from one of the plurality of incompatible VOD systems; **(Fig. 16a: In step 759 the metadata associated with the requested content is analyzed to determine the storage location of the content, [0106] McCoskey.)**

transmitting, to the identified VOD system, a compatible request for the VOD asset; **(Fig. 16b: In step 762 the remote content server 204 is notified of the request, [0107] McCoskey.)**

receiving the requested VOD asset from the identified VOD system; **(Fig. 17a: In step 804 the requested content is transmitted to the aggregator 201, [0109] McCoskey.)**

adapting the received VOD asset to be compatible with the requesting receiver station; **(Fig. 17b: In steps 812 and 813 the content is formatted to the required format, [0111] McCoskey.)**

transacting for the requested VOD asset with the requesting receiver station and the identified VOD system. **(Fig. 17c: If billing or fees are**

**applicable routine 830 enters the user, content meta data and content provider into the billing process 900, [0117] McCoskey.)**

McCoskey further teaches receiving all currently available VOD assets, in response to the request for the assets. **(Remote content crawler 356 retrieves all information about all content not previously logged, [0065])**

However, McCoskey does not explicitly teach each received list being formatted in a unique protocol and translating the received lists into a generic protocol.

In an analogous art Ogawa, which discloses a system for collecting information stored in separate systems and transmitting a combined list of all assets, clearly teaches receiving the lists in different protocols and translating the lists into a generic protocol. **(Fig. 6: The EPG data collection and delivery center 1 receives EPG data from a plurality of sources in different formats and data converting section 14 converts the data into a generic format and stores the data in the transmitting-data storing section 131, column 10 lines 53-67.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McCoskey by receiving the lists in different formats and translating them into a generic format, as taught by Ogawa, for the benefit of providing updated information to the users without changing individual system configurations (see column 2 lines 31-42 Ogawa).

Consider **claims 13, 20 and 32**, McCoskey and Ogawa, combined as in claims 11, 19 and 31, clearly teach each VOD system includes a business management system. **(Aggregator 201 negotiates fees with content providers and distributes compensation to the content providers, [0123] McCoskey.)**

When a program is received at the receiving station an event is recorded showing a purchase of that program. **(Fig. 10: When content is downloaded the content delivery server 450 logs the event with database administrator 502, [0126] McCoskey.)** The purchase event is then transmitted from the VOD gateway to the corresponding business management system. **(Fig. 10: Content fee and copyright billing server 507 transmits compensation to the content providers, [0123] McCoskey.)**

Consider **claims 18, 19 and 31**, McCoskey clearly teaches a system, having a transmitting station including a gateway server **(Fig. 2 Aggregator 201)** and a receiving station including a generic client **(Fig. 2 Set top terminal 206)**, providing video on demand services from a plurality of incompatible and non-interoperable VOD systems. **(Fig. 1: The system 200 provides VOD services from a plurality of incompatible devices, [0045] – [0046])** Each VOD system



having an asset management system. **(Fig. 16b: The remote servers use routine 763 to control the dissemination of the content, [0107] McCoskey.)**

receiving a request from a receiver station for all currently available VOD assets; **(A programming search request is created and sent by the user, [0086]. The search criteria may be set so as to return all available content.)**

transmitting a request from said VOD gateway to said first and second VOD asset management system for a first and second list of all currently available VOD assets stored in said first and second VOD system. **(Fig. 4: Search engine server 350 periodically requests information on all available programming from the remote sources, [0065])**

aggregating the first and second translated lists of all currently available VOD assets to form a combined list of available VOD assets. **(Fig. 10: Aggregator local database 501 contains the remote content database 261 which stores a catalog of all content stored in each of the remote databases, [0079]-[0080].)**

transmitting from the receiving station to the gateway server a request for a list of VOD assets. **(Fig. 13a: Routine 613 sends a search request to the aggregator 201, [0089].)**

transmitting the combined list of VOD assets from the gateway to the receiver. **(Fig. 14b: Routine 671 sends the list of content to the user terminal, [0100].)**

receiving a request from a receiver station for a VOD asset **(Fig. 15b: In step 712 the user requests content then in step 715 the request is sent to the aggregator 201, [0103] McCoskey.)**

determining which VOD server contains the requested content via the received first and second lists of all available content **(Fig. 16a: In step 759 the metadata associated with the requested content is analyzed to determine the storage location of the content, [0106] McCoskey.)**

forwarding the request to the specified first or second VOD server **(Fig.**

**16b: In step 762 the remote content server 204 is notified of the request, [0107] McCoskey.)**

Art Unit: 2623

receiving the requested VOD asset from the identified VOD system; **(Fig. 17a: In step 804 the requested content is transmitted to the aggregator 201, [0109] McCoskey.)**

McCoskey further teaches receiving all currently available VOD assets, in response to the request for the assets. **(Remote content crawler 356 retrieves all information about all content not previously logged, [0065])**

However, McCoskey does not explicitly teach each received list being formatted in a unique protocol and translating the received lists into a generic protocol.

In an analogous art Ogawa, which discloses a system for collecting information stored in separate systems and transmitting a combined list of all assets, clearly teaches receiving the lists in different protocols and translating the lists into a generic protocol. **(Fig. 6: The EPG data collection and delivery center 1 receives EPG data from a plurality of sources in different formats and data converting section 14 converts the data into a generic format and stores the data in the transmitting-data storing section 131, column 10 lines 53-67.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McCoskey by receiving the lists in different formats and translating them into a generic format, as taught by Ogawa, for the benefit of providing updated information to the users without changing individual system configurations (see column 2 lines 31-42 Ogawa).

Consider **claim 37**, McCoskey clearly teaches a video on demand gateway enabling the delivery of VOD services to subscriber equipment from a plurality of incompatible and non-interoperable VOD systems. **(Fig. 1: The system 200 provides VOD services to subscriber terminals from a plurality of incompatible devices, [0045])**

The VOD gateway comprising:

an asset gateway, for providing a unified list of VOD assets from the received lists of all currently available VOD assets. **(Remote content crawler 356 retrieves all information about all content not previously logged, [0065]. Fig. 10: Aggregator local database 501 contains the remote content database 261 which stores a catalog of all content stored in each of the remote databases, [0079]-[0080].)**

a transaction gateway, for conforming communications into the appropriate format from the subscriber to the appropriate VOD system and from the VOD system to the subscriber. **(Fig. 15b user download request is sent to the aggregator. The aggregator then translates and routes the request to the remote server, Fig. 16b step 762. The**

**remote server then transmits the requested content to the aggregator, Fig. 17a step 804. The content is then reformatted, Fig. 17b step 813, and transmitted to the user terminal, Fig. 17c step 826.)**

However, McCoskey does not explicitly teach translating received lists, each in a unique protocol, from each of the incompatible VOD systems.

In an analogous art Ogawa, which discloses a system for collecting information stored in separate systems and transmitting a combined list of all assets, clearly teaches receiving the lists in different protocols and translating the lists into a generic protocol. **(Fig. 6: The EPG data collection and delivery center 1 receives EPG data from a plurality of sources in different formats and data converting section 14 converts the data into a generic format and stores the data in the transmitting-data storing section 131, column 10 lines 53-67.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McCoskey by receiving the lists in different formats and translating them into a generic format, as taught by Ogawa, for the benefit of providing updated information to the users without changing individual system configurations (see column 2 lines 31-42 Ogawa).

6. Claims **38-41** are rejected under 35 U.S.C. 103(a) as being unpatentable over **McCoskey et al. (US Patent Application Publication 2003/0028889)** in view of **Ogawa et al. (US Patent 6,314,571)**, as applied to claims 1 and 37 above, and further in view of **Bowman-Amuah (US Patent 6,434,568)**.

Consider **claim 38**, McCoskey and Ogawa, combined as in claim 37, clearly teach the asset gateway communicating with the transaction gateway **(Fig. 16a: The users request is transferred to routine 762 where it is encrypted for communication to the remote servers, [0107] McCoskey.)** and an asset data manager which communicates with each asset management system via a respective interface program. **(Fig. 7: Search engine server 350 communicates with each VOD system to retrieve content information, [0065] McCoskey. The use of respective interface programs is inherently disclosed in order for search engine server to communicate with the incompatible remote servers.)**

Art Unit: 2623

However, McCoskey and Ogawa do not explicitly teach the use of a servlet and application programming interfaces.

In an analogous art Bowman-Amuah, which discloses a system for transmission of data across a network, clearly teaches the use of a servlet (**Java applet, ActiveX, column 15 lines 42-57**) and application programming interfaces. (**column 52 lines 49-63**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McCoskey and Ogawa by utilizing a servlet or API, as taught by Bowman-Amuah, for the benefit of providing a more secure, architecture neutral, platform independent, portable, flexible and easier to develop system (see column 15 lines 50-57 and column 52 lines 52-56 Bowman-Amuah).

Consider **claim 39**, McCoskey and Ogawa, combined as in claim 37, clearly teach the transaction gateway communicating with each business management system (BMS) via a respective BMS program. (**Fig. 10: Content fee and copyright billing server 507 communicates with the business management system of the content providers, [0123] McCoskey.**)

However, McCoskey and Ogawa do not explicitly teach the use of application programming interfaces. It would have been obvious to modify the system of McCoskey and Ogawa with Bowman-Amuah as shown in claim 38.

Consider **claim 40**, McCoskey and Ogawa, combined as in claim 37, clearly teach the VOD gateway includes a database for storing client transaction information. (**Fig. 11 User database server 511, [0079] McCoskey**)

Consider **claim 41**, McCoskey and Ogawa, combined as in claim 37, clearly teach a session gateway communicating with each VOD manager via respective session interface programs. (**Fig. 16b: Routine 762 routes the request for the content to the correct remote server, [0107] McCoskey. The use of respective session interface programs is inherent, see claim 38.**)

However, McCoskey and Ogawa do not explicitly teach the use of application programming interfaces. It would have been obvious to modify the system of McCoskey and Ogawa with Bowman-Amuah as shown in claim 38.

7. Claim **42** is rejected under 35 U.S.C. 103(a) as being unpatentable over

**McCoskey et al. (US Patent Application Publication 2003/0028889)** in view of

**Ogawa et al. (US Patent 6,314,571)** in view of **Bowman-Amuah (US Patent 6,434,568)**, as applied to claim 41 above, and further in view of **Burkhart (US Patent Application Publication 2002/0006116)**.

Consider **claim 42**, McCoskey, Ogawa and Bowman-Amuah, combined as in claim 41, clearly teach the VOD gateway of claim 41.

However, McCoskey, Ogawa and Bowman-Amuah do not explicitly teach each VOD manager determines channel parameters associated with a subscriber request.

In an analogous art Burkhart, which discloses a system aggregation of content, clearly teaches each VOD manager determines channel parameters associated with a subscriber request. **([0027], [0030], [0032] lines 1-21)** The session gateway communicating VOD channel parameters to the subscriber using one of Session Resource Management **([0030], [0032] lines 7-15)** and Session set up protocol. **([0027], [0030], [0032] lines 33-45)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of McCoskey, Ogawa and Bowman-Amuah by determining channel parameters associated with subscriber requests and communicating them via SRM or SSP, as taught by Burkhart, for the benefit of providing users with information needed to obtain the content (see [0032] Burkhart).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN R. SCHNURR whose telephone number is (571)270-1458. The examiner can normally be reached on Monday - Friday, 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRS

/Christopher Grant/

Supervisory Patent Examiner, Art Unit 2623